

Electronic supplementary information

**Homoleptic and heteroleptic *N*-alkylimidazole zinc(II)-containing
ionic liquids for high current density electrodeposition**

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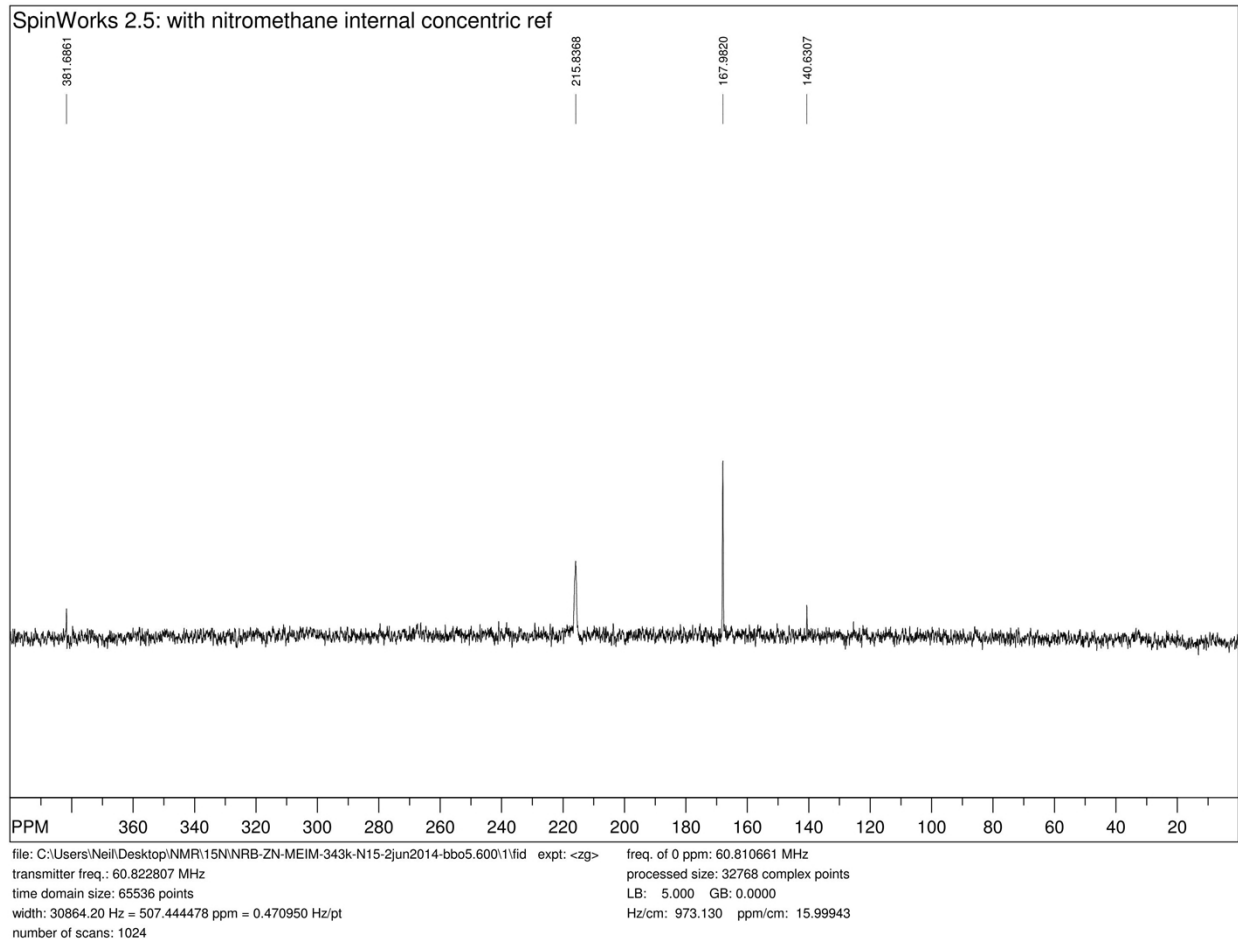


Figure S1: ^{15}N NMR spectrum of liquid $[\text{Zn}(\text{MeIm})_6][\text{Tf}_2\text{N}]_2$ containing a small sealed glass tube of CH_3NO_2 as a standard for the ^{15}N (381.7 ppm) chemical shifts at a temperature of 70 °C.

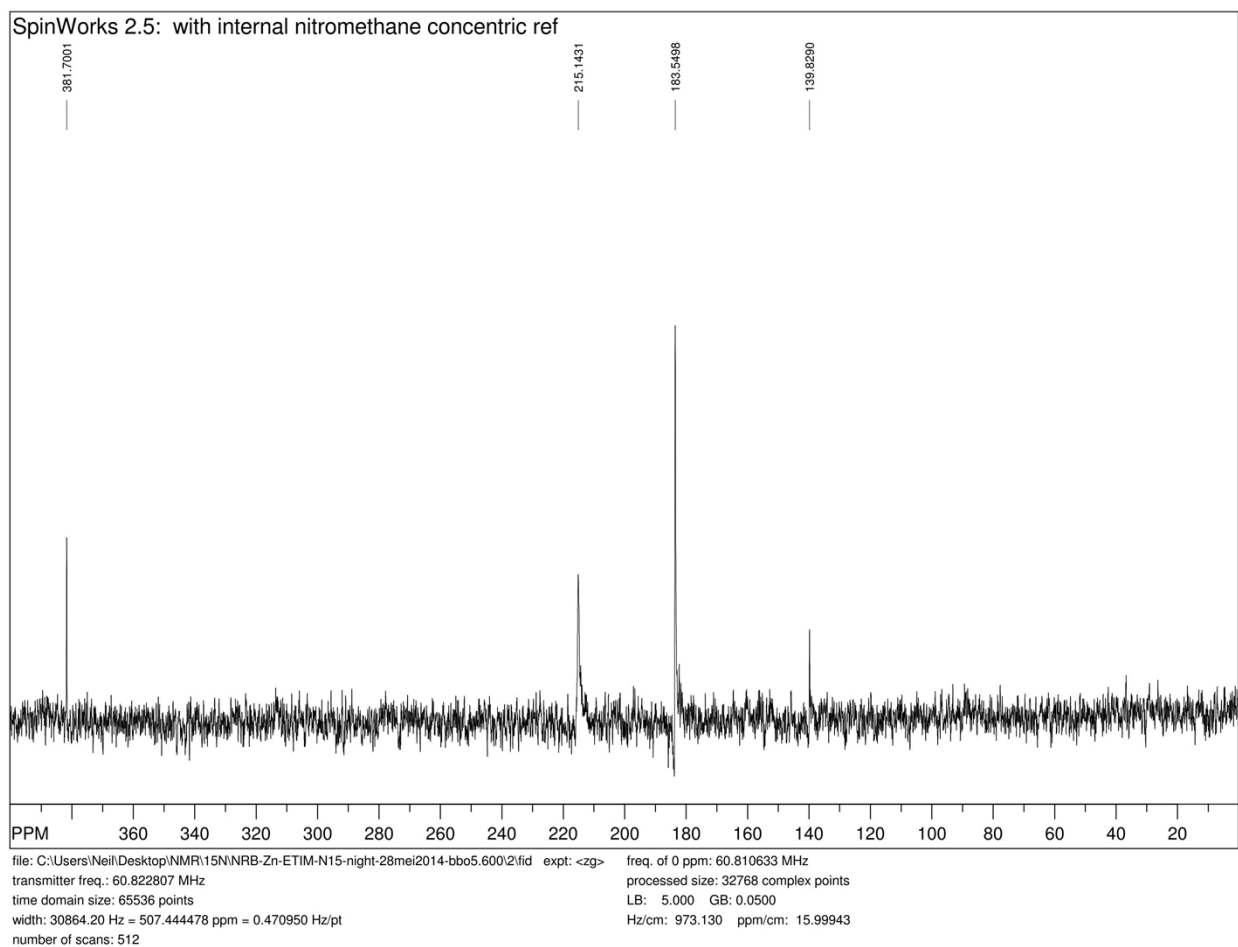


Figure S2: ^{15}N NMR spectrum of liquid $[\text{Zn}(\text{EtIm})_6][\text{Tf}_2\text{N}]_2$ containing a small sealed glass tube of CH_3NO_2 as a standard for the ^{15}N (381.7 ppm) chemical shifts at a temperature of 40 °C.

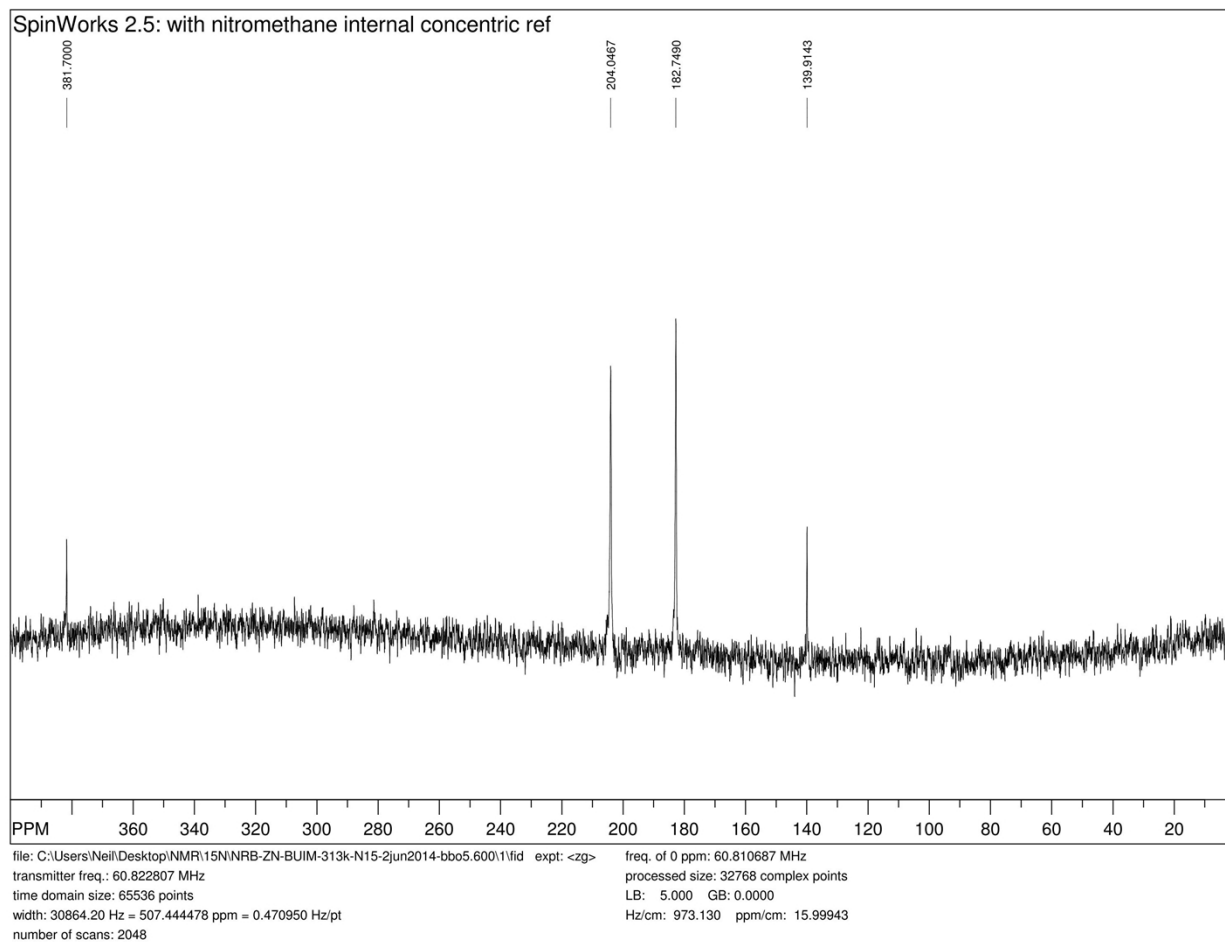


Figure S3: ^{15}N NMR spectrum of liquid $[\text{Zn}(\text{BuIm})_6][\text{Tf}_2\text{N}]_2$ containing a small sealed glass tube of CH_3NO_2 as a standard for the ^{15}N (381.7 ppm) chemical shifts at a temperature of 40 °C.